

WHAT IS CLAIMED:

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A method for improving the performance of an amplifier circuit comprising:

sensing the current in the input stage;

feeding said current to the output stage bias circuit to boost the output bias.

- 2. The method of claim 1, wherein the current is sensed and fed to the output stage bias circuit via a current mirror.
- 3. The method of claim 2, where the current at the entry terminal of the input stage transistor is the mirrored current.
- 4. The method of any of claims 1-3, wherein the circuit comprises BJTs.
- 5. The method of any of claims \(\frac{1}{2}\), wherein the circuit comprises FETs.
- 6. The method of any of claims 1\3, wherein the circuit comprises a combination of BJTs and FETs.
- 7. A transistor circuit, comprising:

an input stage;

an output stage with a biasing circuit; and

a current mirror, which senses the input signal current and

feeds it to the output stage biasing circuit.

- 8. The circuit of claim 7, where the circuit comprises BJTs.
- 9. The circuit of claim 7, where the circuit comprises FETs.

- 10. The circuit of claim 7, where the circuit comprises a combination of BJTs and FETs.
- 11. A method of adaptively boosting the bias of an amplifier circuit, comprising:
 sensing the input signal; and
 boosting the output stage bias with a current equal or proportional to the
 input signal.
- 12. The method of claim 11, where the input signal is an RF signal.
- 13. The method of claim 12, where the input signal is sensed by a current mirror biasing circuit for the input stage.
- 14. The method of claim 13, where the collector current of an input stage BJT is mirrored by the current mirror and fed into an output stage biasing circuit.
- 15. The method of claim 13, where the drain current of an input stage FET is mirrored by the current mirror and fed into an output stage biasing circuit.
- 16. The method of any of claims 13-15, where the current mirror comprises BJTs.
- 17. The method of any of claims 13-15, where the current mirror comprises FETs.
- 18. A subcircuit, to be used in an amplification circuit, comprising:

 an input sensor, arranged to sense the input signal to the circuit; and

 an output stage booster, arranged to boost the bias of an output stage of the

 circuit in proportion to said input signal.
- 19. The subcircuit of claim 18, where the input signal is an RF signal.
- 20. The subcircuit of either of claims 18 or 19, where the input sensor is a current mirror.

